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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,188	01/14/2002	Tracy L. Forea	07414.0055-00000	6282

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1300 I Street, N.W.  
Washington, DC 20005-3315

EXAMINER

CHAKRABARTI, ARUN K

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/050,188

Applicant(s)

Ferea

Examiner  
Arun Chakrabarti

Art Unit  
1634



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on May 6, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) 11-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 0503 6) ☒ Other: Detailed Action

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election of Group I in Paper No. 0503 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Brink et al. (U.S. Patent 5,563,034) (October 8, 1996).

Brink et al teaches a method for detecting the presence or absence or amount of an experimental target-specific probe on a substrate (Abstract) comprising:

(a) exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target, such that the labeled control target binds specifically to control-specific probe bound to the substrate (Claim 1 and Column 9, lines 15-32), and

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(b) measuring a signal from labeled control target bound to control-specific probe to determine the presence or absence or amount of experimental probe (Claim 1 and Column 9, lines 15-32). This rejection is based on the fact that labeled negative control nucleic acid probes of Brink et al can be considered broadly as control target or experimental target nucleic acids and vice versa in absence of a clear definition of a target and the probe either in the specification or in the claim of the instant application.

Brink et al teaches a method, wherein the experimental target-specific probe and a control-specific probes are polynucleotides (Abstract).

Brink et al teaches a method, wherein the control-specific probes that are polynucleotides contain synthetic non-Watson-Crick bases (Figure 4 and Column 6, lines 45-63).

Brink et al teaches a method, wherein the control-specific probes are attached or not attached to the experimental target-specific probe (Column 5, lines 28-35).

Brink et al teaches a method, wherein the labeled control target comprises a fluorophore (Column 9, lines 6-8).

Brink et al teaches a method, wherein the substrate is exposed to a labeled experimental target molecule in a sample, such that labeled experimental target molecule is bound to experimental target-specific probe (Column 9, lines 15-32).

Brink et al teaches a method, wherein the signal from labeled control target bound to control-specific probe is used to quantitate the amount of labeled experimental target in a sample (Column 11, lines 22-26).

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Brink et al teaches a method, wherein the substrate further contains a second feature comprising a second experimental target-specific probe and the control specific probe (Column 8, line 27 to Column 9, line 14).

Brink et al teaches a method for detecting the presence or absence or amount of an experimental target probe on a substrate (Claim 1 and Column 8, line 27 to Column 10, line 55) comprising:

(a) exposing a substrate containing a feature comprising an experimental target probe to a labeled control target, such that the labeled control target binds to experimental target probe bound to the substrate (Claim 1 and Column 9, lines 15-32), and

(b) measuring a signal from labeled control target bound to experimental target probe to determine the presence or absence or amount of experimental probe (Claim 1 and Column 9, lines 15-32).

Brink et al teaches a method for determining the relative amount of two different experimental target nucleic acid sequences in a sample (Column 11, line 64 to Column 12, line 25), comprising:

providing a nucleic acid array, wherein the array comprises a first feature that comprises first experimental target-specific probes that are complementary to a first experimental target sequence and control-specific probes that do not hybridize to experimental target sequences, and a second feature that comprises second experimental target-specific probes that are

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complementary to a second experimental target sequence and control specific probes that do not hybridize to experimental target sequences (Column 11, lines 3-35);

contacting the array with:

(1) a sample that includes experimental target sequences that are labeled with a first label;

and

(2) synthetic control target sequences that are labeled with a second label and that hybridize to the control-specific probes on each of the first and second features, but that do not hybridize with the experimental target-specific probes (Column 12, line 40 to Column 13, line 45);

determining the intensity of any signal from the first and second labels in the first and second features (Column 15, lines 28-45); and

determining the ratio of the intensity of the signal from the first label to the intensity of the signal from the second label for each of the first and second features; and

comparing the ratios of the intensity of the signal for the first and second features to calculate the relative amount of the first and second experimental nucleic acid target sequences in the sample (Column 15, lines 28-45).

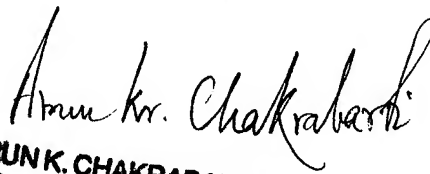
### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Chakrabarti, Ph.D. whose telephone number is (703) 306-5818.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

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Gary Benzion, can be reached on (703) 308-1119. Any inquiry of a general nature or relating to the status of this application should be directed to the Group analyst Chantae Dessau, whose telephone number is (703) 605-1237. Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission via the P.T.O. Fax Center located in Crystal Mall 1. The CM1 Fax Center numbers for Technology Center 1600 are either (703) 305-3014 or (703) 308-4242. Please note that the faxing of such papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989).

  
**ARUNK. CHAKRABARTI**  
**PATENT EXAMINER**

Arun Chakrabarti

Patent Examiner

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June 2, 2003